



IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Stephen V. Deckers

Confirmation No.: 3651

Application No.: 10/788,543

Examiner: Khoi H. Tran

Filing Date: Feb. 27, 2004

Group Art Unit: 3651

Title: Disk Cartridge Data Storage Methods and Apparatus

Mail Stop Appeal Brief-Patents  
Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

TRANSMITTAL OF REPLY BRIEF

Sir:

Transmitted herewith in **triplicate** is the Reply Brief with respect to the Examiner's Answer mailed on Oct. 27, 2005. This Reply Brief is being filed pursuant to 37 CFR 1.193(b) within two months of the date of the Examiner's Answer.

(Note: Extensions of time are not allowed under 37 CFR 1.136(a))

(Note: Failure to file a Reply Brief will result in dismissal of the Appeal as to the claims made subject to an expressly stated new grounds of rejection.)

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Signature: *Thomas Olson*

Respectfully submitted,

**Stephen V. Deckers**

By *Thomas Olson*

**Thomas Olson**

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Reg. No. **44,271**

Date: **Dec. 14, 2005**

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PATENT APPLICATION

Docket No.: 10004377-4

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND  
INTERFERENCES

In re application of:

Inventor(s):	Stephen V. Deckers
Serial No.:	10/788,543
Filed:	February 27, 2004
Title:	DISK CARTRIDGE DATA STORAGE METHODS AND APPARATUS
Art Unit:	3651
Examiner:	Khoi H. Tran
Confirmation No.:	7095

Mail Stop APPEAL BRIEF – PATENTS  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

REPLY BRIEF

SIR OR MADAM:

This communication is the Reply Brief in this application, which is being filed in response to the Examiner's Answer mailed on 10/27/2005. This Reply Brief is being filed under the provisions of 37 C.F.R. § 41.41.

(Continued on next page.)

Docket No. 10004377-3  
Reply Brief

Reply to Examiner's Answer:

(A). Whether the Cited References Disclose All the Claim Limitations.

In the Examiner's Answer, the Office contends that the combination of Kulakowski '455 and Stefansky '412 does provide a cartridge form factor per the claimed invention. The Appellant understands the Office to base this contention on the following premises and conclusion:

- 1) 1<sup>st</sup> premise: the Appellant has failed to provide any details pointing out the specifics of "tape cartridge form factor" and tape cartridge dimension, and thus, a tape cartridge form factor could be any shape;
- 2) 2<sup>nd</sup> premise: Appellant concurred that Stefansky discloses "a single disk drive which...conforms to the dimension of a tape..." and thus Stefansky's cartridge has a tape cartridge form factor.
- 3) conclusion: therefore, the combination of Stefansky and Kulakowski provide a tape cartridge form factor per the claimed invention.

With respect to the Office's contention that the Appellant has failed to provide any details pointing out the specifics of "tape cartridge form factor," the Appellant points out that the specification provides at least four examples of specific tape cartridge form factors, those being DAT, DDS, DLT, and LTO. The Appellant also contends that numerous tape cartridge form factors are well known to those of ordinary skill in the art. The Appellant has also argued, and continues to maintain, that the term "tape cartridge form factor," as known to those of ordinary skill in the art, implies both shape and dimension. The Office has not argued against this point, and provides no evidence to the contrary. Accordingly, one of ordinary skill in the art would know and understand that there are several known tape cartridge form factors and that any given tape cartridge form factor is associated with a given shape, dimensions and the like.

The Appellant argues further that 35 U.S.C. 103 contains no requirements for any level of specificity and/or detail with respect to the definition of a given claim term. As a basis for its position that since Stefansky shows a tape cartridge form factor since it discloses a disk drive conforming to a dimension of a tape cartridge, the Office states that the exact shape of the claimed cartridge is not known, and that the exact dimension of the tape cartridge is not known, and that the mere mentioning of "tape cartridge form

factor” within the specification does not provide any structural distinctions as to exactly what the cartridge would resemble.

As pointed out above, the Appellant contends that there is no requirement for the term “tape cartridge form factor” to be defined in terms of an exact dimension and/or in terms of an exact shape, nor is there any requirement that the specification define exactly what the cartridge would resemble. Besides, as is explained above, the specification provides examples of specific tape cartridge form factors known to those of ordinary skill in the art.

The Office appears to accept that the Appellant’s claim term, “tape cartridge form factor” is defined to include at least both size and shape of a cartridge. (Examiner’s Reply, page 5, third paragraph.) The Office also accepts that Stefansky discloses a disk cartridge having only a dimension of a tape, and nothing more. (Id., page 6, first paragraph.) However, the Office then argues that since Stefansky discloses a disk drive which conforms only to the dimension of a tape [with no requirement for shape], then the disk drive of Stefansky has a tape cartridge form factor.

The Appellant asserts that since the Office accepts that the Appellant has defined the term “tape cartridge form factor” to include both size and shape of the cartridge, and also accepts that Stefansky does not disclose a cartridge having the shape of a tape cartridge, then the Office cannot logically conclude that the cartridge of Stefansky has a tape cartridge form factor.

The Office argues that the Appellant’s specification indicates that the “tape cartridge form factor” could be in any shapes including the ones that are not known. The Appellant respectfully submits that the Office has misread the specification. The Appellant has reviewed the specification and finds no teaching, suggestion, or indication tending to imply that the “tape cartridge form factor” could be any shapes including the ones that are not known.

Rather, at the place cited by the Office, the specification reads as follows:

Also, the cartridge shell (111) preferably adheres to a known cartridge form factor such as, for example, a tape cartridge form factor. That is, the cartridge shell (111) can adhere to any one of a number of known form factors, such as those known by the designations of DAT, DDS, DLT, or LTO.

The Office points out that the Appellant's specification states, "it is understood, however, that [in accordance with one embodiment] the cartridge shell (111) need not adhere to a known cartridge form factor, and need not adhere to a tape cartridge form factor." Based on at least this statement in the specification, the Office concludes that the tape cartridge form factor could be any shapes including ones that are not known.

However, the fact that the specification states that the cartridge shell (111) need not adhere to a tape cartridge form factor, in accordance with one embodiment, is not equivalent to a statement that the tape cartridge form factor could be any shape including ones that are not known. Furthermore, this statement in the specification has no bearing on whether the Appellant's claim term, "tape cartridge form factor" includes both dimension and shape. As is explained above, the accepted definition of "tape cartridge form factor" includes both dimension and shape. Thus, it does not logically follow, as suggested by the Office, that Stefansky provides a cartridge form factor per the claimed invention.

As a further argument, the Appellant poses the following question: If Stefansky does disclose "a disk drive cartridge having a tape cartridge form factor," as the Office argues, then why has the Office not employed Stefansky in an anticipation rejection of the Appellant's claims? The Appellant submits that the answer to this question is that Stefansky cannot be so employed in an anticipation rejection against the Appellant's claims for the sole reason that Stefansky does not disclose a disk drive cartridge having a tape cartridge form factor.

For at least the reasons discussed above, the Appellant maintains that the prior art does not teach or suggest all the claim limitations, as is required under 35 U.S.C. 103.

(B). Whether there is Suggestion or Motivation to Combine References.

In the Examiner's Answer, the Office maintains its argument that there is some suggestion or motivation found in the references themselves or in the knowledge generally available to one of ordinary skill in the prior art because "it would have been obvious for one of ordinary skill in the art to have provided Kulakowski HDD with a housing having the same dimensions of a magnetic tape housing because such HDD cover had been known in the art."

That is, the Office's argument, reduced to basic form, is that there is some motivation to combine reference X with reference Y because it would have been obvious to one of ordinary skill in the art to do so since reference X had been known in the art.

5 The Appellant maintains that this argument by the Office does not amount to an objective reason to combine the reference teachings, and is therefore not sufficient to establish that there is some motivation or suggestion to combine the reference teachings. More specifically, a statement that modifications of the prior art to meet the claimed invention would have been well within the ordinary skill of the art because the  
10 references relied upon teach that all aspects of the claimed invention were known in the art (as the Office argues) is not sufficient to establish a *prima facie* case of obviousness. (MPEP 2143.01.)

The Appellant notes further that the prior art must suggest the desirability of the claimed invention for *prima facie* obviousness. The Appellant contends that there is no  
15 evidence of any kind tending to show that the prior art suggests the desirability of the claimed invention. That is, there is no advantage, incentive, goal, or other such suggestion in the prior art as to why making the claimed invention would be desirable.

For at least the reasons discussed above, the Appellant maintains that there is no suggestion or motivation either in the references themselves or in the knowledge  
20 generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings, as is required under 35 U.S.C. 103.

(C). Whether there is Reasonable Expectation of Success.

In the Examiner's Answer, the Office states that the test for obviousness is not  
25 whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference, nor is it that the claimed invention must be expressly suggested in any one or all of the references. The Offices states further that the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art, and that as long as some motivation or suggestion to combine  
30 the references is provided by the prior art taken as a whole, the law does not require that the references be combined for the reasons contemplated by the inventor.

The Appellant argues that these statements are immaterial to the question of whether the prior art conveys to those of ordinary skill in the art a reasonable

expectation of success in combining the references, as is required by 35 U.S.C. 103.

That is, regardless of the legal principles embodied in the statements made by the Office, any evidence showing there was no reasonable expectation of success may support a conclusion of nonobviousness. (MPEP 2143.02.)

5 The Appellant continues to argue that the device of Kulakowski depends upon the use of dual-ended cartridges and that Stefansky teaches a single ended cartridge.

Therefore, there is no reasonable expectation of success in combining the teachings of Kulakowski with those of Stefansky because the respective teachings are totally divergent.

10 Additionally, the cartridge configuration taught by Stefansky necessitates that a printed circuit board (14) is mounted to the exterior of the cartridge (cartridge includes cover (10) and base (12)). (Stefansky, col. 3, lines 46-59, figures 1 and 5.) Kulakowski teaches that the cartridges (2) are designed to be used with an automated library (50) that includes a gripper assembly/picker (62) for gripping and moving the cartridges.

15 The Appellant submits that anyone of ordinary skill in the art would see that the cartridge configuration of Stefansky with its exterior-mounted printed circuit board could not be used with the gripper/picker of Kulakowski because the gripper/picker of Kulakowski would damage the exterior printed circuit board of Stefansky when gripping the Stefansky cartridge, and that such person of ordinary skill in the art would have no  
20 reasonable expectation of success in combining Stefansky and Kulakowski, as is required for obviousness.

For at least the reasons discussed above, the Appellant maintains that there is no reasonable expectation of success when combining the reference teachings, as is required under 35 U.S.C. 103.

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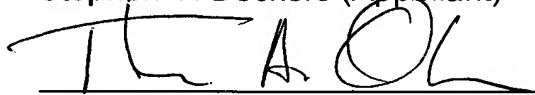
Summary

The Appellant considers claims 21-32 to be in condition for allowance, and respectfully requests the Board to overturn the final rejections of those claims, and further requests that those claims be allowed.

Dated this 14th day of December, 2005.

Respectfully submitted,

Stephen V. Deckers (Appellant)

A handwritten signature in black ink, appearing to read 'T. A. Olson', written over a horizontal line.

Thomas A. Olson

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